

CLAIMS

1 - Process for establishing a digital data connection between a transmitter (1) and a receiver (3), linked by a transmission medium (2) that is subject to disturbance effects, a process in which a data signal is transmitted via the transmission medium (2), which data are protected by an error detection and correction code of known effectiveness, while adjusting the signal level that is received by the receiver (3) so that only a limited number of errors are apparent, and the transmission level is then increased ensuring that a safety margin (M) is built-in to counter the effect of disturbances upon reception, the process being characterised in that:

- a pre-correction error rate measurement point (S1), for a received level (N1), is determined upon reception,
- depending on the effectiveness of the code with respect to the error rate, an anticipated post-correction error rate curve (C2) and its position in relation to the measurement point (S1) are determined,
- an acceptable error rate limit at some point along the curve (C2) is chosen, and,
- starting from the reception level (S2) on the curve (C2) that relates to the error rate limit, the transmission is increased according to the projected safety margin.

2 - Process in accordance with claim 1, wherein the connection is used to exchange connection-establishing data between the transmitter (1) and the receiver (3).

3- Process in accordance with claim 1, wherein, to check a measurement of the signal level (N1) received from the transmitter (1), the transmission level is varied by a set factor and then a check is made that the level (N1) of received signal varies by the same factor.

4 - Process in accordance with claim 3, wherein an additional control measurement of the received level (N1) is made, once the transmission level has been previously increased by the set factor and the value of the additional measurement decreased by the stated factor is retained as the initial measurement value (N1).

5 - Process in accordance with claim 4, wherein the transmission level is varied by controlling a calibrated attenuator (14) in an intermediate frequency stage of the transmitter (1).

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